APPLICANT:

: Yoichi Sano

SERIAL NO.:

10/789,734

EXAMINER: ART UNIT:

Unknown 1753

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**Amendments to the Specification:** 

Please replace paragraph [0039] with the following amended paragraph:

[0039] As shown in the reaction formulae given above, hydrogen hydroxyl ions and

hydrogen gas are produced at the cathode, metallic ions such as sodium ions are reduced to

become metals, and the phenomenon of these substances reacting with water occurs. If the water

contains ions such as calcium or magnesium at the time of electrolysis, these ions are also

reduced to metals, and components such as calcium and magnesium, by further reaction, produce

hydroxides. As a result, these compounds are often deposited on the surface of the electrode as

scale.

Please replace paragraph [0070] with the following amended paragraph:

[0070] As these equations show, hydrogen hydroxyl ions and hydrogen gas are produced at

the cathode, metallic ions such as sodium ion are reduced to become metals, and these react with

water. If the water contains ions such as calcium or magnesium during electrolysis these ions are

also reduced to metals, and components such as calcium and magnesium produce hydroxides.

As a result, these compounds are often deposited on the surface of the electrode as scale.